What is claimed is:

1. A method of fabricating a non-luminescent multi-cell substrate useful for carrying a microarray of biological polymers comprising the acts of:

providing a non-porous substrate;

5 providing a non-luminescent microporous membrane formed by a phase inversion process, the process comprising the acts of:

formulating a casting dope comprising a solvent, one or more non--solvents, opaque solids, and polyamide(s);

mixing and blending the casting dope to cause 10 dissolution of the polyamide and opaque solids therein;

producing an opaque solids-filled phase inversion casting dope;

casting a thin portion of the opaque solids-filled phase inversion casting dope; and

15 quenching the casted portion of the opaque solids-filled phase inversion casting dope to form a substrate;

providing a surface treatment;

applying the surface treatment to the non-porous substrate; and

intermingling the non-porous substrate having the surface 20 treatment with the non-luminescent microporous, membrane such that the non-porous substrate is sufficiently covalently bonded to the non-luminescent microporous membrane wherein the combination produced thereby is useful in microarray applications.

2. The method of claim 1 wherein the surface treatment is selected from the group comprising:

3-aminopropyl triethoxysilane, N-(2-aminoethyl)-3-aminopropyl trimethoxysilane, 3-glycidoxypropyltrimethoxysilane, (10-5 carbomethoxydecyl) dimethylchlorosilane or 2-(3,4-epoxycyclohexyl)-ethyltrimethoxysilane.

3. The method of claim 1 wherein, the surface treatment comprises a 3-aminopropyl triethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

4. The method of claim 1 wherein, the non-porous substrate is selected from the group comprising:

glass, Mylar, ceramic, acrylic, polypropylene, polycarbonate, polysulfone, polyamide and polyaramid.

     5.   The method of claim 1 wherein, the non-porous substrate is glass.

     6.   The method of claim 1 wherein, the non-porous substrate is a polyester.

     7.   The method of claim 1 wherein, the non-porous substrate is Mylar.

     8.   The method of claim 7 wherein, , the surface of the Mylar is oxidized with sulfuric acid or corona discharge to enable it to bond to a polyamido polyamine epichlorohydrin polymer.

     9.   The method of claim 1 wherein the opaque solids are carbon particles.

     10.   The method of claim 1 wherein the carbon particles are less than 5 microns in size.

     11.   The method of claim 1 wherein the carbon particles are substantially uniformly distributed throughout the polyamide support

     12.   The method of claim 1 wherein the carbon particles are partially incorporated into the polyamide support.

     13.   The method of claim 1 wherein the carbon particles are substantially wholly incorporated into the polyamide support.

     14.   The method of claim 1 wherein the polyamide support is charge-modified.

     15.   A multi-cell substrate, useful for carrying a microarray of biological polymers comprising:

     a substantially non-reflective microporous membrane which provides little fluorescence from about three hundred (300) nm to about seven hundred (700) nm formed by a phase inversion process, the non-reflective microporous membrane comprising:

     a phase-inversion support; and

     a plurality of opaque solids that are substantially chemically non-reactive with the phase inversion support and intimately bound to, and/or partially/completely contained within, said phase-inversion;

     a non-porous substrate; and

a surface treatment, operatively positioned between the substantially non-reflective microporous membrane and the non-porous substrate, for sufficiently covalently bonding the non-porous substrate to the microporous membrane wherein the combination multi-cell substrate produced thereby is useful in microarray applications.

16. The multi-cell substrate of claim 15 wherein, the surface treatment is selected from the group comprising:

3-aminopropyl triethoxysilane, N-(2-aminoethyl)-3-aminopropyltrimethoxysilane, 3-glycidoxypropyltrimethoxysilane, (10-carbomethoxydecyl) dimethylchlorosilane or 2-(3,4-epoxycyclohexyl)-ethyltrimethoxysilane.

17. The multi-cell substrate of claim 15 wherein, the non-porous substrate is selected from the group comprising:

glass, Mylar, ceramic, acrylic, polypropylene, polycarbonate, polysulfone, polyamide and polyaramid.

18. The multi-cell substrate of claim 15 wherein, the surface treatment comprises a 3-aminopropyl triethoxysilane followed by treatment with a polyamido-polyamine epichlorohydrin resin.

19. The multi-cell substrate of claim 15 wherein, the non-porous substrate is glass.

20. The multi-cell substrate of claim 15 wherein, the non-porous substrate is a polyester.

21. The multi-cell substrate of claim 15 wherein the, the non-porous substrate is Mylar.

22. The multi-cell substrate of claim 15 wherein the phase inversion membrane is selected from the group consisting of:

nylon 66, nylon 46, nylon 6, polysulfone, polyethersulfone, polyvinylidenediflouride (PVDF).

23. The multi-cell substrate of claim 15 wherein the phase-inversion support comprises polyamides.

24. The multi-cell substrate of claim 15 wherein the opaque solids are pigments.

25. The multi-cell substrate of claim 15 wherein the opaque solids are carbon particles.

26.   The multi-cell substrate of claim 15 wherein the phase inversion support has been charge-modified.

27.   The multi-cell substrate of claim 15 wherein carbon particles are less than five microns in size.

28.   The multi-cell substrate of claim 15 wherein carbon particles are substantially uniformly distributed throughout the polyamide support.

29.   The multi-cell substrate of claim 15 wherein the carbon particles are partially incorporated into the polyamide support.

30.   The multi-cell substrate of claim 15 wherein the carbon particles are substantially wholly incorporated into the polyamide support.

31.   The multi-cell substrate of claim 15 wherein the polyamide has been charge-modified.

32.   A multi-cell substrate, useful for carrying a microarray of biological polymers comprising:

an optically-passive substrate comprising:

a phase-inversion support and opaque solids that are
5   substantially non-reactive chemically with the phase inversion support, in a weight ratio with said phase-inversion support such that said optically-passive substrate absorbs light at substantially all wave lengths from about 300 nm to about 700 nm;

a non-porous substrate; and

10   a surface treatment, operatively positioned between the microporous membrane and the non-porous substrate, for sufficiently covalently bonding the non-porous substrate to the microporous membrane wherein the combination multi-cell substrate produced thereby is useful in microarray applications.

33.   The multi-cell substrate of claim 32 wherein the phase-inversion support comprises polyamide.

34.   The multi-cell substrate of claim 32 wherein the phase-inversion support is in the form of a membrane.

35.   The multi-cell substrate of claim 32 wherein the opaque solids are carbon particles.

36.   The multi-cell substrate of claim 35 wherein the carbon particles are less than about 5 microns in size.

37.   The multi-cell substrate of claim 35 wherein the carbon particles are substantially uniformly distributed throughout the polyamide support.

38.   The multi-cell substrate of claim 35 wherein the carbon particles are partially incorporated into the polyamide support.

39.   The multi-cell substrate of claim 37 wherein the substrate absorbs light at substantially all wavelengths from about 300 to about 700 nm.

40.   The multi-cell substrate of claim 32 wherein the polyamide has been charge-modified.

41.   The multi-cell substrate of claim 39 wherein the substrate has a reflectance of no more than 50% of incident light at any wavelength within said range of wavelengths.

42.   The multi-cell substrate of claim 32 wherein the phase-inversion support is hydrophilic.

43.   The multi-cell substrate of claim 42 wherein the phase-inversion support is skinless.

44.   The multi-cell substrate of claim 43 wherein the phase-inversion support comprises nylon.

45.   The method of claim 1 wherein the phase inversion membrane is selected from the group consisting of:

nylon 66, nylon 46, nylon 6, polysulfone, polyethersulfone, polyvinylidenediflouride (PVDF).